

Fuel Dispensing Operation (Oil Spill Prevention Regulations)		
Oil SPCC [40 CFR 112]	<ul style="list-style-type: none"> Are there receptors in the area that spilled or leaked fuel could migrate to? [40 CFR 112.7] 	<i>Find the nearest storm drain that is down-gradient from the pumps. Storm drains are considered "navigable waterways" if there is any chance that material entering them could reach a body of water. If no such receptor exists, then make sure this fact is documented in your facility SPCC plan.</i>
	<ul style="list-style-type: none"> Is equipment on-hand to prevent spilled or leaked fuel from reaching the receptors? [40 CFR 112.7(c)] 	<i>Have a spill kit on-hand that includes enough equipment to prevent spilled fuel from reaching the storm drain or other receptors. Drainblockers, spill socks and pads, and vermiculite are all helpful. Tailor your kit to your site.</i>
	<ul style="list-style-type: none"> Are your pumps supervised during the day and securely locked at night? [40 CFR 112.7(e)(9)] 	<i>University settings are prone to vandalism. When they are not attended, make sure your pumps are locked in a manner that prevents the flow of oil once they're off. Lighting the pump area is a good idea.</i>

Fuel Dispensing Operation (Underground Storage Tank Regulations)		
UST [Massachusetts: 527 CMR 9.00 or 40 CFR 280]	<ul style="list-style-type: none"> Is your UST permitted and registered with the appropriate authorities? [527 CMR 9.05(C)(1) or 40 CFR 280.22] 	<i>In Massachusetts, the local fire department keeps a registry of all USTs and their initial testing documentation.</i>
	<ul style="list-style-type: none"> Do the fills for your USTs incorporate a spill-containment manhole? [527 CMR 9.05(G)(2) or 40 CFR 280.20(C)] 	<i>A spill containment bucket capable of holding at least 3 gallons of liquid should encompass the fill for your USTs (Massachusetts). There is an exemption for tanks smaller than 1,100 gallons and older than 1989. Federal regulations specify that overfill protection be provided, and the manhole is one method.</i>
	<ul style="list-style-type: none"> During filling, how do you know when the tank becomes full? [527 CMR 9.05(G)(3) or 40 CFR 280.20(c)] 	<i>High-level alarms or automatic shut-offs are required by Massachusetts and federal regulations to prevent overfilling.</i>
	<ul style="list-style-type: none"> What type of leak detection system do you have? [527 CMR 9.05(D)(2) or 40 CFR 280.40] 	<i>All tanks must have some type of leak detection system in place. The regulations prescribe one of a few options, including interstitial space monitoring for dual-walled tanks, in-tank monitoring, and soil vapor monitoring. Note that the option of inventory reconciliation/annual tightness testing is no longer acceptable in Massachusetts.</i>
	<ul style="list-style-type: none"> Has your tank ever leaked? [527 CMR 9.05(D)(7) or 40 CFR 280.34] 	<i>You should be able to provide documentation about the nature of any leak as well as any repairs that were ever made on the tank or to the leak detection system.</i>
	<ul style="list-style-type: none"> Do you know how much water infiltrated your tank in the past month? [527 CMR 9.05(D)(1)(e)(4)] 	<i>Massachusetts regulations dictate that USTs be monitored on a monthly basis for water infiltration. Water measurements must be recorded and any excess water in the tank removed.</i>

Fuel Dispensing Operation (Fuel Vapor Recovery Regulations)		
Vapor Collection and Control [Massachusetts: 310 CMR 7.24 (6)]	<ul style="list-style-type: none"> Are your pumps equipped with vapor collection systems? [310 CMR 7.24(6)(b)(1)] 	<i>Motor vehicle fuel cannot be dispensed unless the pump is equipped with a functioning vapor collection system capable of capturing 95% of the vapors displaced during vehicle refueling. Exemptions exist, but probably do not apply.</i>
	<ul style="list-style-type: none"> Are employees trained in the proper use of the fuel dispensing pumps and corresponding vapor recovery units? [310 CMR 7.24(6)(c)(3)] 	<i>Anyone who is to operate a fuel dispensing pump must first be trained in the proper operation of the pump and the vapor recovery system. This training MUST be documented [310 CMR 7.24(6)(f)(5)].</i>
	<ul style="list-style-type: none"> Are operating instructions for the pump and vapor recovery unit clearly posted at the fuel dispensing area? [310 CMR 7.24(6)(c)(5)] 	<i>The posted instruction must include the following:</i> <ul style="list-style-type: none"> <i>A clear description of how to correctly dispense fuel using the vapor recovery system,</i> <i>A warning not to attempt continued refueling after automatic pump shutoff, and</i> <i>A telephone number for reporting problems.</i>
	<ul style="list-style-type: none"> Do you have a record of the daily and monthly throughputs of fuel from the dispensing area? [310 CMR 7.24(6)(f)(3)] 	<i>A log must be kept that lists how much fuel was pumped on a daily basis. Log entries for each month should be combined to give a monthly total. Many fuel dispensing systems can give this information electronically.</i>
	<ul style="list-style-type: none"> Is the vapor recovery system tested at least once every 5 years? [310 CMR 7.24(6)(i)] 	<i>Vapor recovery systems must be checked at least once every 5 years to verify that they are operating properly. Records of these tests must be kept on file.</i>

Parts Cleaning Operations - Cold Cleaning Degreasing (Clean Air Regulations)		
Solvent Metal Degreasing [Massachusetts: 310 CMR 7.18(8)]	<ul style="list-style-type: none"> Does your degreasing unit conform to the standards set in CAA regulations? [310 CMR 7.18(8)(a)] 	<i>The CAA sets specific requirements pertaining to freeboard, solvent storage, drain diameter, solvent vapor pressure, etc. Newer degreasers and units supplied by contracted vendors will likely conform to these standards. At a minimum, understand what solvents are being used and document their vapor pressures. Specs for vendor-supplied units are easily obtained from the vendor.</i>
	<ul style="list-style-type: none"> Does your degreaser have a cover? Is it closed? [310 CMR 7.18(8)(a)(1) and (a)(4)] 	<i>Parts cleaners are singled out in CAA regulation because of the volatile nature of the solvents used in them. The regulations specifically state that every cold-cleaning degreaser must be equipped with a cover that can be operated easily with one hand. The cover must be closed at all times when the degreaser is not in use.</i>
	<ul style="list-style-type: none"> Is your degreaser properly labeled? [310 CMR 7.18(8)(d)(1)] 	<i>Label must be conspicuously located, and contain standard operating procedures for proper operation of the unit. Pre-printed labels are often available from vendors.</i>
	<ul style="list-style-type: none"> Do you keep a solvent inventory? [310 CMR 7.18(8)(f)] 	<i>Records must be kept that describe how much solvent is added to the degreaser, and how much waste solvent is removed. Back calculation of these values, theoretically, will provide you with the amount that was lost as volatile emission. This record is best kept as a log near the unit itself. A description of the solvents used in the unit should be kept with the log.</i>

Parts Cleaning Operations - Cold Cleaning Degreasing (RCRA Regulations)		
RCRA [Massachusetts: 310 CMR 30 or 40 CFR 260]	<ul style="list-style-type: none"> Are your spent solvents hazardous waste? [310 CMR 30.122 and 30.131 or 40 CFR 261.22 and 261.31] 	<p><i>The answer is probably yes. If they don't meet the ignitability characteristic then they probably fall under one of the F codes. Assuming that the spent degreaser IS hazardous waste, the important issue is WHEN do you decide a solvent is spent? Most cold-cleaning degreasers have a reservoir that fluid is drawn from and then drains back into. There is no distinction between spent and virgin solvent because of the constant re-use. At some point, it becomes clear that the solvent in the reservoir is too dirty to re-use and must be replaced. Only after this determination is made does the solvent in the reservoir become hazardous waste and RCRA rules apply.</i></p>
	<ul style="list-style-type: none"> Do you replace the solvent in the reservoir yourself? 	<p><i>If you replace the solvent in your degreaser yourself, remember that there are specific rules about how you must store, label and ship waste solvent off site for disposal (see "Oil Changes" section below). A good practice is to have a pre-labeled container in your hazardous waste accumulation area designated for waste solvent accumulation.</i></p>
	<ul style="list-style-type: none"> Does a contracted vendor come in periodically and replace the solvent in the degreaser? 	<p><i>Hiring a vendor to replace solvent and dispose of the waste will eliminate hazardous waste storage compliance issues. However, each time the vendor comes and takes solvent away it must be shipped under a manifest. In Massachusetts, a two-part manifest is often used when a vendor is under contract to remove the waste, reclaim it, and then return it for re-use - as is often the case with degreasing solvents [310 CMR 30.315].</i></p>

Waste Antifreeze		
General Guidelines	<ul style="list-style-type: none"> What type of antifreeze do you have? 	<p><i>GREEN - ethylene glycol, most toxic (via ingestion) and also most common.</i></p> <p><i>PINK - propylene glycol, less toxic and also less common (because it's more expensive).</i></p>
	<ul style="list-style-type: none"> Is antifreeze a hazardous waste? 	<p><i>No. Neither ethylene glycol nor propylene glycol based antifreeze is a listed or characteristic hazardous waste. HOWEVER, both types of antifreeze tend to pick up metals (including lead) from the radiator and engine solder, and therefore the potential exists for used antifreeze to have become a hazardous waste during use.</i></p>
	<ul style="list-style-type: none"> How should I handle and dispose of antifreeze? 	<p><i>The safest bet is to assume that your antifreeze waste IS hazardous and label, accumulate and dispose of it according to RCRA regulation. The best (and least expensive) endpoint for used antifreeze is a recycler who will reclaim and resell it. MA DEP has a list of antifreeze recyclers across the state. Be aware that antifreeze that is given to hazardous waste vendors is usually incinerated or landfilled - at considerable cost.</i></p>

Oil Changes (RCRA Regulations)		
RCRA [Massachusetts: 310 CMR 30 or 40 CFR 260]	<ul style="list-style-type: none"> Are you handling your waste oil as if it were a hazardous waste? [310 CMR 30.130] 	<i>In Massachusetts, waste oil is considered to be a hazardous waste and must be handled, accumulated, stored and disposed of according to hazardous waste regulations.</i>
	<ul style="list-style-type: none"> Have you set up a hazardous waste accumulation area in the garage? [310 CMR 30.340 and 30.351 or 40 CFR 262.34(a)] 	<i>If you will be accumulating waste oil as a hazardous waste, then you must delineate an area where this accumulation will take place. Paint some lines on the floor and hang a sign with 1-inch-high letters that says "Hazardous Waste" to identify your accumulation area. There must be some sort of containment system at your accumulation area - something that will pool spilled oil without letting it escape, and that will hold at least the entire capacity of the largest container in your area (usually 55 gallons). Drum pallets that will hold 55 gallons of oil are a good idea.</i>
	<ul style="list-style-type: none"> Do you keep your drums of waste oil securely closed at all times? [310 CMR 30.685(1) or 40 CFR 265.173(a)] 	<i>Unless you are in the act of adding oil, waste oil drums MUST remain closed at all times. Often it is necessary to use a funnel to add waste oil to the drum, but this funnel cannot be left in the open bung. Funnels with tight-closing caps are available and will allow you to keep a funnel in place AND comply with the closed container rule.</i>
	<ul style="list-style-type: none"> Are your waste oil drums labeled properly? [310 CMR 30.682 or 40 CFR 262.34(a)(2) and (a)(3)] 	<i>Make sure you have a label affixed to the SIDE of each waste oil drum that has the words "hazardous waste", a description of the waste ("waste oil"), the type of hazard the waste presents ("toxic" or "Environmental Pollutant") and the date that the drum became FULL. It is convenient to fill out a stack of waste oil labels to have ready - just stick them on the drums as you go and date them when the drums are full.</i>
	<ul style="list-style-type: none"> Are you inspecting the condition of your hazardous waste accumulation area on a weekly basis? [310 CMR 30.686 or 40 CFR 265.174] 	<i>You are required to inspect hazardous waste accumulation areas on a weekly basis, and the burden of proof falls upon you to show regulators that the inspections have been taking place. Make up a checklist that includes things like "containers in good condition, containers closed, labels affixed, no leaks, etc.", and include a place for the name of the person performing the inspection and a place for the date. Create a log-book with pages of these checklists, and keep a written record of your inspections. Accumulation area inspections only take 45 seconds a week - and documenting them is the only sure way to prove they have been done. If you encounter problems during an inspection - i.e. your area fails one of the items on the checklist - make a note in the log-book describing what you've done to fix the problem.</i>

Oil Changes (RCRA Regulations continued)		
RCRA [Massachusetts: 310 CMR 30 or 40 CFR 260]	<ul style="list-style-type: none"> Do you have the paperwork to prove that you have been disposing of your waste oil properly? [310 CMR 30.310 and 30.316 or 40 CFR 262.20] 	<p><i>Hazardous waste must be shipped off-site under a hazardous waste manifest. It is critical that one person in the garage is trained in the applicable RCRA and DOT regulations, and will be on hand to sign the manifest every time a waste is shipped off-site. In Massachusetts, a 4-part manifest can be substituted for the traditional 8-part form if waste oil is the hazardous waste being shipped.</i></p>
	<ul style="list-style-type: none"> Have you considered other waste items that might be oil-contaminated or otherwise classifiable as hazardous waste? 	<p><i>OIL FILTERS - are not hazardous waste if they are empty according to RCRA rules. According to RCRA, "empty" means that of the entire capacity of the filter when full, only 3% (by weight) or less remains in the filter when it is disposed of. [40 CFR 261.7(b) and 261.4(b)(13)]</i></p> <p><i>OIL DRAINAGE PANS - that are placed under vehicles to collect oil that is being removed are often kept separate from the bulk used oil drums. Be aware that the oil in these devices is a waste, and technically it is subject to the same rules as a waste oil drum. Place a label on the side of the apparatus and store it in your waste accumulation area when it is not in use.</i></p>

Oil Changes (Oil Spill Prevention Regulations)		
Oil SPCC [40 CFR 112]	<ul style="list-style-type: none"> Have you accounted for waste oil and virgin oil drums/containers in your University SPCC Plan? 	<p><i>A drum (and even smaller containers) of oil, whether waste or virgin, represents a significant amount of oil that could potentially be released to the environment. For this reason all oil drums and oil storage containers in the garage must be accounted for in your facility's SPCC Plan.</i></p>
	<ul style="list-style-type: none"> Do your drums have adequate containment to prevent the largest spill that could reasonably occur from reaching navigable waterways? [40 CFR 112.7(c)] 	<p><i>Examine the areas where you are storing your waste oil and virgin oil drums/containers. If there are floor drains present, they could very well represent avenues for spilled oil to migrate to storm drains and into nearby waterways. Evaluate the usefulness of the floor drains and consider blocking them with plumber's bladders. The idea here is to be sure that spilled or leaked oil from any of the drums will collect somewhere and not find an escape route into the environment. Intact, concrete floors will provide this kind of containment, but you should consider products such as temporary berms and drum pallets if there is any question about the soundness of the area's containment. The containment area around the drums must be capable of holding the entire contents of the largest container in the area - in most cases, 55 gallons. RCRA rules also dictate that waste drums be kept in containment, so complying with one of the two regulations will actually bring you into compliance with both, in the case of waste oil.</i></p>

Heating Oil Storage (for facilities using oil heat) (Oil Spill Prevention Regulations)		
Oil SPCC [40 CFR 112]	<ul style="list-style-type: none"> Have you accounted for this heating oil tank in your university SPCC Plan? 	<i>Heating oil tanks hold enough oil to cause a potentially significant release, and they must be accounted for in your university SPCC Plan.</i>
	<ul style="list-style-type: none"> Is your heating oil tank in an area that will contain a spill that might occur? [40 CFR 112.7(c)] 	<i>Heating oil tanks must be treated in the same manner as oil storage drums - there must be some sort of containment in place that will pool the largest spill that could occur (in this case the entire contents of the tank, usually 275 gallons). Intact, concrete floors free of cracks, loose seams and floor drains, will serve this purpose. If the floor around the tank is not suitable for containment, a concrete berm is a relatively inexpensive engineering control that can provide the necessary containment. 275 gallons of oil translates roughly to 40 cubic feet of berm capacity.</i>
	<ul style="list-style-type: none"> Are you inspecting the tank periodically for corrosion, wear, and leaky fittings? [40 CFR 112.7(e)(2)(vi)] 	<i>Take the time to check out the condition of the tank. The regulations state that a visual inspection must take place "periodically", so a good rule of thumb is to inspect before each oil delivery is made. Any oil that is accumulating in the containment area due to leaks or spills from the tank must be cleaned up immediately.</i>

Equipment and Machinery Storage (Oil Spill Prevention Regulations)		
Oil SPCC [40 CFR 112]	<ul style="list-style-type: none"> Have you evaluated environmental receptors in the area where you store or park equipment and machinery? [40 CFR 112.7(c)] 	<p><i>Any equipment with a gas tank or other oil tank (hydraulic oils are included) must be considered as a potential source of released oil. This includes heavy excavation machinery and smaller equipment such as lawn mowers and snow blowers. Excluded from SPCC consideration is any equipment that is registered for over-the-road transport (i.e. has a license plate). Just be sure that the area where you are storing these types of equipment is free of storm drains, floor drains, and any other avenue that could allow leaked oil or fuel to escape containment.</i></p>
	<ul style="list-style-type: none"> Have you described in your university SPCC plan the location where you store fuel/oil-containing equipment? [40 CFR 112.1] 	<p><i>Your university SPCC Plan is intended to be a complete, all-encompassing document that details the location and disposition of all oil stored on the campus. Small gasoline or hydraulic fluid tanks are no exception.</i></p>